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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUNG, YUBIN

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,805	Applicant(s) MATSUBARA, AKIO	
	Examiner YUBIN HUNG	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/15/08 has been entered.

Response to Amendment/Arguments

2. Claims 1-13 are still pending.
3. In view of Applicant's after-final amendment filed on 01/15/08, which has been entered, the objection to the drawings has been withdrawn.
4. Applicant's arguments with respect to claim 1 (pp. 6-7 of the response) have been considered but are moot in view of the new ground(s) of rejection. (Note that one part of the argument is directed to the new limitation, and the other part, on page 7, alleges that the recited admitted prior art does not disclose blocks corresponding to the

region of interest. While a pixel is a 1x1 block, US 6,314,452 to Dekel et al., cited in the 06/04/07 Office action, will be relied upon to teach this limitation; see below.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al. (US 7,106,366), Dekel et al. (US 6,314,452), Hagiwara et al. (US 7,065,751) and APA (admitted Prior Art: Figs. 1-6, PP. 2-3, paragraphs 7-9 and PP. 9-13, paragraphs 29-44).

7. Regarding claim 1, and similarly claims 12 and 13, Parker discloses

- a decompression unit to perform a decompression process on an image file compressed using a format other than the JPEG 2000 format [Fig. 4, refs. 219 (compressed image) & 404 (decompression unit); claim 5 on Col. 20 (non-JPEG 2000 compression)]
- a compression unit to perform a compression process on a non-compressed image or the image file decompressed by the decompression unit using a JPEG 2000 format [Fig. 4, ref. 406; Col. 10, lines 14-16]
- a compression execution unit (that) decompresses the image file by use of the decompression unit and compressing the decompressed image file using the JPEG 2000 format by use of the compression unit in a case where (the determination unit determines that) the image file corresponds to a compressed file compressed using a format other than the JPEG 2000 format [Fig. 4, ref. 400 (the compression execution unit); Col. 9, line 66-Col. 10, line 16. Note that the determination unit is taught by Namizuka, see below]

Note that the compression execution unit [Fig. 4, ref. 400] has the capability of JPEG 2000-compressing uncompressed images (see Fig. 4, refs. 405 and 406). In addition, in Fig. 2a, ref. 206 of Parker further discloses compressing an image file using the JPEG 2000 format for non-compressed image files (see also Col. 4, lines 13-15; Col. 20, claim 6). Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the compression execution unit as disclosed in Fig. 4 to separately receive and JPEG 2000-compress un-compressed image files. The motivation would have been to give the unit additional capability, namely to be able to perform JPEG 2000 compression of uncompressed file, in addition to transcoding.

Parker does not expressly disclose the following, which is taught by Dekel:

- a designation allowing unit to allow an arbitrary designation of a region of interest for an image file stored in a storage region
[Fig. 2, refs. 203 & 204; Col. 4, line 62-Col. 5, line 7. Note that server 120 (considered the allowing unit) necessarily has to be able to allow an arbitrary designation]

Parker is combinable with Dekel because they both have aspects that are from the same field of endeavor of compression/decompression. At the time of the invention, it would have been obvious to modify Parker with the teaching of Dekel as recited above. The reasons at least would have been to avoid the necessity of transmitting the entire image, as Dekel indicates in Col. 1, lines 25-30.

The combination invention of Parker and Dekel does not expressly disclose the following, which is taught by Hagiwara:

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- a determination unit to determine that the image file corresponds to at least one of a non-compressed file and a compressed file compressed using a format other than the JPEG 2000 format
[Fig. 1, ref. 2 (determination unit); Fig. 3, refs. 48 (indicating whether a file is compressed or not) & 52 (indicating the compression mode); Col. 1, line 65-Col. 2 line 8; Col. 5 lines 7-14. Note that per Fig. 5 and Col. 5, lines 24-41, the CPU is considered the determination unit]

Parker is combinable with Hagiwara because they both have aspects that are from the same field of endeavor of compression/decompression. At the time of the invention, it would have been obvious to modify the combined invention of Parker and Dekel with the teaching of Hagiwara so that information regarding a file's compression status and compression mode are recorded and later determined for decompression. The reasons at least would have been to be able to decompress (or not decompress, if uncompressed) a file correctly, as Hagiwara indicates in Col. 1, line 64-Col. 2, line 5.

The combined invention of Parker, Dekel and Hagiwara does not expressly disclose the following, which is taught by APA

- an extraction output unit to extract from the compressed image file compressed by the compression unit a plurality of blocks corresponding to a region of interest designated by the designation allowing unit, and outputting the extracted image file
[P. 3, lines 1-2; note that Dekel in Fig. 7 and the corresponding descriptions in the specification teaches that the extracted data corresponds to blocks]

The combined invention of Parker, Dekel and Hagiwara is combinable with APA because they both have aspects that are from the same field of endeavor of compression.

At the time of the invention, it would have been obvious to modify the combined invention of Parker, Dekel and Hagiwara with the teaching of APA as recited above.

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The reasons at least would have been to be able to improve communication speed and memory consumption, as APA indicates in P. 3, lines 2-5.

Therefore it would have been obvious to combine APA with Parker, Dekel and Hagiwara to obtain the invention as specified in claim 1.

8. Regarding claims 2 and 3, note that both tiles and precincts are units for dividing/organizing (often large) images that are supported in the JPEG 2000 standard, and it would have been obvious to one of ordinary to extract image data using either as output unit as appropriate for the underlying applications (for example, if the available memory is small, then tile is often used to lower memory requirement; see APA, especially paragraphs 7 and 8).

9. Regarding claims 4 and 5, APA further disclose the use 5x3 filter bank (claim 4) and 9X7 filter bank (claim 5) [P. 12, last four lines of paragraph 40].

10. Regarding claim 6, Parker further discloses

- wherein the decompression unit performs a decompression process on an image compressed using a DCT (Discrete Cosine Transform) coding format as the format other than the JPEG 2000 format
[Fig. 2a, ref. 206; claim 5]

11. Regarding claims 7 and 8, APA further discloses processing ROI in block units of tiles and precincts (and therefore would have been obvious to extract ROIs in such block units) [P. 2, paragraph 8].

12. Regarding claim 9, since in JPEG 2000 an image is usually coded at multiple resolution levels, it would have been obvious to extract the ROI only at the desired resolution (i.e., to adjust the resolution to the desired level); for example, it is well known and widely used in the art to only extract the ROI at the lowest resolution level for display as a thumbnail.

13. Regarding claim 10, note that JPEG 2000 supports arranging data in different progressions such as precinct-color component-resolution (e.g., see Fig. 1, ref. 12 and paragraph 35 of Wee et al.: US 2005/0084132) and it is well known in the art that many monitors are monochrome in nature. Therefore it would have been obvious to extract monochrome images only (e.g., the green component of a color image) in order to display on such monitors.

14. Regarding claim 11, note that JPEG 2000 supports progressive transmission (and display) of images and (e.g., see Fig. 1, ref. 12 and paragraphs 32 and 35 of Wee et al.: US 2005/0084132) progressions that also include layers (representing different image details); therefore it would have been obvious to extract and output successive layers so that the transmission of layers can be terminated once the desired image details have been received and displayed. In this way the computing (such as required for extraction and decoding) and transmission cost can be reduced.

Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUBIN HUNG whose telephone number is (571)272-7451. The examiner can normally be reached on 7:30 - 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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March 16, 2008